

Deviation



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

C3-OH

Job Sheet OH199340



Part No: C3-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 3,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/20/19

Job Tracking No:

Due Date: 10/8/19

Created By: Jennifer Renwick

Type: Rework - OH

Description: RA759 / Order 18544 / SN 2428-03

Note: DWG C3/O&OPM-C3 Rev L. Rev. 2/L IPP Rev. A 18.04.24 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup Hrs	Run Hrs		
110	External Load - Issue SN	1 pcs		10/8/19	0.00	0.00	External Load - 1	AUG 20 2019 DAS 77 9-89
							External Load - 2	
							External Load - 3	
115	External Load - 2 - B4B	1 pcs		10/8/19	0.00	1.00	External Load - 1 - B4B	AP S207099 2019/09/03
							External Load - 2 - B4B	
							External Load - 3 - B4B	
120	QC 5	1 pcs		10/8/19	0.00	0.00	QC 5 - 10	DAS 18 9-89
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 43	
							QC 5 - 49	
							QC 5 - 51	
							QC 5 - 5	
							QC 5 - 66	
							QC 5 - 9	
							QC 5 - 50	
							QC 5 - 30	DAS 30 9-89
							QC 5 - 40	
							QC 5 - 61	
							QC 5 - 81	
130	Customer Acceptance	1		10/8/19	0.00	0.00		



Container No: S207099



Part: C3

Job No: OH199340

Serial No/Batch: S207099

Revision: 2/L

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/03/19

Plex 8/20/19 10:28 AM Dart.Renwick.Jennifer

140' Outsource - 2 - NDT per • QSI038	1 pcs	10/8/19		SKY002-VC	10	2019-09-12
150 Packaging 2-1 - Receive - B4B	1 pcs	10/8/19	0.00 0.00	Packaging 2 - 1 - B4B		
				Packaging 2 - 2 - B4B		
				Packaging 2 - 3 - B4B		
				Packaging 2 - 5 - B4B		
				Packaging 2 - 4 - B4B		
				Packaging 2 - 6 - B4B		
				Packaging 2 - 7 - B4B		
				Packaging 2 - 8 - B4B		
				Packaging 2 - 9 - B4B		
				Packaging 2 - 10 - B4B		
				Packaging 2 - 11 - B4B		
				Packaging 2 - 12 - B4B		
				Packaging 2 - 13 - B4B		
				Packaging 2 - 14 - B4B		
				Packaging 2 - 15 - B4B		
				Packaging 2 - 16 - B4B		
				Packaging 2 - 17 - B4B		
				Packaging 2 - 18 - B4B		
				Packaging 2 - 19 - B4B		
				Packaging 2 - 20 - B4B		
				Packaging 2 - 21 - B4B		
				Packaging 2 - 22 - B4B		
				Packaging 2 - 23 - B4B		
				Packaging 2 - 24 - B4B		
				Packaging 2 - 25 - B4B		
				Packaging 2 - 26 - B4B		
				Packaging 2 - 27 - B4B		
				Packaging 2 - 28 - B4B		
				Packaging 2 - 29 - B4B		
				Packaging 2 - 30 - B4B		
				Packaging 2 - 31 - B4B		
				Packaging 2 - 32 - B4B		
				Packaging 2 - 33 - B4B		
				Packaging 2 - 34 - B4B		
				Packaging 2 - 35 - B4B		
				Packaging 2 - 36 - B4B		
160 QC 6	1 pcs	10/8/19	0.00 0.00	QC 6 - 9		
				QC 6 - 68	DAS	
				QC 6 - 61	81	SEP 20 2019
				QC 6 - 40	9-89	
				QC 6 - 81		
165 External Load - 3 - B4B	1 pcs	10/8/19	0.00 0.50	External Load - 1 - B4B		AP/2019/09/23
				External Load - 2 - B4B		
				External Load - 3 - B4B		
170 QC 5	1 pcs	10/8/19	0.00 0.00	QC 5 - 10		
				QC 5 - 12		
				QC 5 - 17		
				QC 5 - 18		
				QC 5 - 19		
				QC 5 - 22		
				QC 5 - 24		
				QC 5 - 3		

				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	DAS 30 9-89
				QC 5 - 40	SEP 27 2019
				QC 5 - 61	
				QC 5 - 81	
175	Outsource - 15 - Nickel Plate	1 pcs	10/8/19	GRO002-VC	2019-09-24
180	Packaging 2-2 - Receive - B4B	1 pcs	10/8/19	0.00 0.00	
				Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
185	QC 6	1 pcs	10/8/19	0.00 0.00	
				QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	DAS 61 9-89
				QC 6 - 40	
				QC 6 - 81	
190	External Load - 4 - B4B	1	10/8/19	0.00 1.33	External Load - 1 - B4B

				pcs		External Load - 2 - B4B	
						External Load - 3 - B4B	
195	QC 5	1	10/8/19	0.00 0.00		QC 5 - 10	
		pcs				QC 5 - 12	
						QC 5 - 17	
						QC 5 - 18	
						QC 5 - 19	
						QC 5 - 22	
						QC 5 - 24	
						QC 5 - 3	
						QC 5 - 43	
						QC 5 - 49	
						QC 5 - 51	
						QC 5 - 58	
						QC 5 - 68	
						QC 5 - 9	
						QC 5 - 50	
						QC 5 - 30	DAS 30 OCT 29 2019
						QC 5 - 40	9-89
						QC 5 - 61	
						QC 5 - 81	
200	Packaging 3-1 - Stock - B4B	1	10/8/19	0.00 0.00		Packaging 3 - 1 - B4B	
		pcs				Packaging 3 - 2 - B4B	
						Packaging 3 - 3 - B4B	
						Packaging 3 - 4 - B4B	
						Packaging 3 - 5 - B4B	
						Packaging 3 - 6 - B4B	
						Packaging 3 - 7 - B4B	
						Packaging 3 - 8 - B4B	
						Packaging 3 - 9 - B4B	
						Packaging 3 - 10 - B4B	
						Packaging 3 - 11 - B4B	
						Packaging 3 - 12 - B4B	
						Packaging 3 - 13 - B4B	
						Packaging 3 - 14 - B4B	
						Packaging 3 - 15 - B4B	
						Packaging 3 - 16 - B4B	
						Packaging 3 - 17 - B4B	
						Packaging 3 - 18 - B4B	
						Packaging 3 - 19 - B4B	
						Packaging 3 - 20 - B4B	
						Packaging 3 - 21 - B4B	
						Packaging 3 - 22 - B4B	
						Packaging 3 - 23 - B4B	
						Packaging 3 - 24 - B4B	
						Packaging 3 - 25 - B4B	
						Packaging 3 - 26 - B4B	
						Packaging 3 - 27 - B4B	
						Packaging 3 - 28 - B4B	
						Packaging 3 - 29 - B4B	
						Packaging 3 - 30 - B4B	DAS 30 OCT 29 2019
						Packaging 3 - 31 - B4B	9-89
						Packaging 3 - 32 - B4B	
						Packaging 3 - 33 - B4B	

OH 199340

[Dart Hawkesbury] Job Sheet - Renwick, Jennifer

012166

210 DC - 1 - B4B	1 pcs	10/8/19	0.00 0.00	Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	21
220 QC21-FG	1 Ea	10/8/19	0.00 0.00	DC - 1 - B4B	9-89
				DC - 2 - B4B	21
				QC 21 - FG - 21	9-89

OCT 29 2019

Part Op 110 - Issue S/N

Descriptions: 115 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART

120 - (QC5- Inspect part completeness to step on W/O)

140 - LIQUID PENETRANT INSPECTION AS PER QSI 038

160 - (QC6- All purchased or subcontracted products) 1-Triage parts to be sent out for plating

165 - Prepare for nickel plate

170 - (QC5- Inspect part completeness to step on W/O)

175 - --Issue P/O; _____ -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class

1/2 -Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required

185 - (QC6- All purchased or subcontracted products)

190 - RE-ASSEMBLE. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

195 - (QC5- Inspect part completeness to step on W/O)

200 - (Identify as per dwg & Stock Location: _____)

210 - Photocopy blue file and create labels

220 - (QC21- Final Inspection - Work Order Release)

OCT 29 2019

M 27500-16T G2 T14

Job BOM

16" = 5095144

Part / Item	Component Name	Quantity	Operation	Container
C3-AR	C-Series Remote Hook 3,000 lbs Lift Capacity	1 Ea (1 ea)	110-External Load - Issue SN	
188-FPSS-1032-1/4	Set Screw	2 Ea (2 ea)	190-External Load - 4 - B4B	5110495
188-FSCS-832-5/8	Clock Spring Cover Screw	4 Ea (4 ea)	190-External Load - 4 - B4B	5126989
600.1300-A	Label	1 pcs (1 ea)	190-External Load - 4 - B4B	
600.1313	C3 Warning Label	1 pcs (1 ea)	190-External Load - 4 - B4B	5196326
AN4-16A	Bolt	3 Ea (3 ea)	190-External Load - 4 - B4B	5196064-2
AN4-17A	Bolt	1 Ea (1 ea)	190-External Load - 4 - B4B	5157429-3
AN6-15A	Bolt	1 Ea (1 ea)	190-External Load - 4 - B4B	5209068
C2-14-2	Label Rivets	2 Ea (2 ea)	190-External Load - 4 - B4B	
C2-3-1	Latch Shaft Du Bearing	2 pcs (2 ea)	190-External Load - 4 - B4B	5189923
C2-3-2-1	Roller Pin Retaining Ring	2 Ea (2 ea)	190-External Load - 4 - B4B	5168898
C2-3-3-1	Latch Roller DU Bearing	1 pcs (1 ea)	190-External Load - 4 - B4B	5182513
C2-3-5	Spacer, Teflon	2 Ea (2 ea)	190-External Load - 4 - B4B	5199313
C2-3-8	Actuator Shaft Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	5196193
C3-10-2	Lock Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	5197483
C3-12-1	Lock Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	5193685
C3-12-6	Lock Roller Pin Circlip	2 Ea (2 ea)	190-External Load - 4 - B4B	5157956
C3-13-1	Keeper Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	5206235
C3-13-5	Spring, Keeper	1 pcs (1 ea)	190-External Load - 4 - B4B	5146022
C3-3-4-1	Ring, Retaining	4 pcs (4 ea)	190-External Load - 4 - B4B	5199546
C3-3-9	Actuator Spring	1 pcs (1 ea)	190-External Load - 4 - B4B	5128955
C3-4-1	Load Beam Bushing	2 pcs (2 ea)	190-External Load - 4 - B4B	5192917
C3-7-1	Load Beam Bumper	1 pcs (1 ea)	190-External Load - 4 - B4B	5186739
C3-7-2	Lock Bumper	2 pcs (2 ea)	190-External Load - 4 - B4B	5110788
C3-8-4	Solenoid Cover Gasket	1 pcs (1 ea)	190-External Load - 4 - B4B	5180680
MS21044N4	Nut, Self-Locking	4 Ea (4 ea)	190-External Load - 4 - B4B	5203176
MS21083N3	Nut	2 Ea (2 ea)	190-External Load - 4 - B4B	5142051
MS21083N6	Nut	1 Ea (1 ea)	190-External Load - 4 - B4B	5192157
MS35266-63	Solenoid Cover Screw	1 Ea (1 ea)	190-External Load - 4 - B4B	5183289
NAS1149F0332P	Washer (AN960-10L)	2 Ea (2 ea)	190-External Load - 4 - B4B	5103666-1
NAS1149F0363P	Washer (AN960-10)	1 Ea (1 ea)	190-External Load - 4 - B4B	5095330-3
NAS1149F0432P	Washer (AN960-416L)	8 Ea (4 ea)	190-External Load - 4 - B4B	5131202
NAS1149F0632P	Washer (AN960-616L)	2 Ea (2 ea)	190-External Load - 4 - B4B	5048297-2

C2-10-1 SPRING PIN
C3-3-4 LINK PIN
C2-3-3 LATCH ROLLER

IX

2X

IX

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5116487

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-External Load - Issue SN	C3	1	1	0
190-External Load - 4 - B4B	188-FPSS-1032-1/4	2	113	0
	188-FSCS-832-5/8	4	205	0
	600.1309-A	1	69	0
	600.1313	1	25	0
	AN4-16A	3	503	0
	AN4-17A	1	283	0
	AN6-15A	1	24	0
	C2-14-2	2	112	0
	C2-3-1	2	68	0
	C2-3-2-1	2	32	0
	C2-3-3-1	1	28	0
	C2-3-5	2	105	0
	C2-3-8	2	50	0
	C3-10-2	1	28	0
	C3-12-1	2	44	0
	C3-12-6	2	108	0
	C3-13-1	2	70	0
	C3-13-5	1	30	0
	C3-3-4-1	4	122	0
	C3-3-9	1	33	0
	C3-4-1	2	43	0
	C3-7-1	1	17	0
	C3-7-2	2	28	0
	C3-8-4	1	21	0
	MS21044N4	4	77	0
	MS21083N3	2	91	0
	MS21083N6	1	50	0
	MS35266-63	1	22	0
	NAS1149F0332P	2	1,653	0
	NAS1149F0363P	1	362	0
	NAS1149F0432P	4	732	0
	NAS1149F0632P	2	316	0

Part Specifications

Specifications could not be found.

Lectite 242 (5186572)

Lectile 620 (5194792)

Saf-T-eye (M138973)

Aeroshell grease NO.7 (M138724)

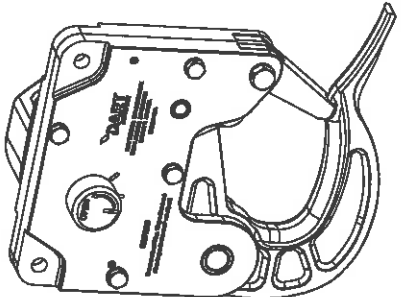
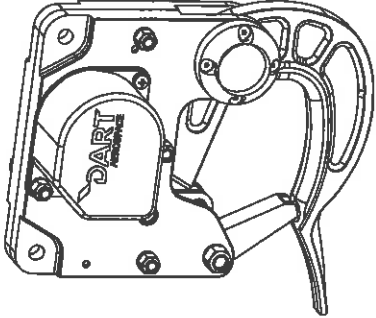
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SEE ATTACHED DEVIATION

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REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0200	UPDATED TO NEW DRAFTING STANDARDS. CHD PANS TO AN & MS NUMBERS.	10/29/2014	DPD	JAG
2	15-0200	C2-1-2 REPLACED W/ 188-PPS-1032-1/A C2-3-3 REPLACED W/ 188-PPS-1032-5/B. /MODIFIED ENGRAVING NOTER & DETAILS.	8/27/2015	DPD	JAG

ASSTY QTY	QTY	Part #	Description	Material	I/O INFORMATION OR SPECIFICATIONS	PG.
	1	C2-1-1	MANUAL RELEASE PIN	6061-16		2
	1	C2-3-1	BEARING DU	BRONZE	[KAMMAN #6060U4]	3
	1	C2-3-2	LATCH ROLLER PIN	4340		3
	1	C2-3-3	RETAINING RING	STEEL	887/16 [KAMMAN #100-00211]	3
	1	C2-3-4	LATCH ROLLER	4162/4142		3
	1	C2-3-5	LATCH ROLLER DU BEARING	BRONZE		3
	1	C2-3-6	SPACER	NYLON	[KAMMAN-CAIR #F560A140]	3
	1	C2-3-7	LATCH	SS 17-4PH		3
	1	C2-3-8	ACTUATOR BUSHING	SINTERED BRONZE	887/16 X 5/8 [KAMMAN #88-1824-00] MODIFIED	3
	1	C2-3-9	LATCH SHAFT	4160/4142		3
	1	C2-3-10	ACTUATOR	SS 17-4PH		3
	1	C2-3-11	ACTUATOR STOP, DOWEL	STEEL	887/16 X 7/8 [KAMMAN-CAIR #P0144A020]	2
	1	C2-3-12	SPRING PIN	S.S.	81/8 X 7/8 [KAMMAN-CAIR #P2232A182]	2
	1	C2-3-13	LOCATING PIN	S.S.	887/16 X 1 [KAMMAN-CAIR #P0144A010]	2
	1	C2-3-14	LABEL INVERT	124 S.S.	NO 4 [KAMMAN-CAIR #P165A106]	NIS
	1	C2-3-15	SIDE PLATE	6061-16		2
	1	C2-3-16	LINK PIN	DRILL ROD		3
	1	C2-3-17	RETAINING RING	STEEL	81/8 [KAMMAN #5100-00128P]	3
	1	C2-3-18	LINK	01		3
	1	C2-3-19	ACTUATOR SPRING	SS 304 WIRE	81/8 X 8 DEB/CORF	3
	1	C2-3-20	LOAD BEAM BUSHING	AL-BRONZE		2
	1	C2-3-21	LOAD BEAM ASSEMBLY	POLYURETHANE		2
	1	C2-3-22	LOCK BUMPER	POLYURETHANE		2
	1	C2-3-23	SOLENOID ASSEMBLY	POLYURETHANE		2
	1	C2-3-24	SOLENOID COVER GASKET	GASKET PAPER		2
	1	C2-3-25	SOLENOID COVER	6061-16		2
	1	C2-3-26	CLOCK SPRING COVER	6061-16		2
	1	C2-3-27	CLOCK SPRING	SS 301	DEB/CORF	2
	1	C2-3-28	LOCK SPRING	S.S.		3
	1	C2-3-29	IDEAL RELEASE DOWEL	6061-16		2
	1	C2-3-30	LOCK BUSHING	4160/4142		2
	1	C2-3-31	LOCK SHAFT	4160/4142		3
	1	C2-3-32	LOCK	4160/4142		3
	1	C2-3-33	LOCK ROLLER	4160/4142		3
	1	C2-3-34	LOCK ROLLER PIN	4160/4142		3
	1	C2-3-35	LOCK ROLLER RETAINING RING	STEEL	81/8 [KAMMAN #5100-00128P]	3
	1	C2-3-36	KEEPER DOWEL-BUSHING BUSHING	BRONZE	[KAMMAN #6060U4]	2
	1	C2-3-37	KEEPER	4160/4142		2
	1	C2-3-38	KEEPER SPRING	303 S.S.	DEB/CORF	2
	1	C2-3-39	CORD GRP	BRASS	M8X 1.25 [KAMMAN-CAIR #B188K6]	2
	1	C2-3-40	MALE PLUG	PE High Density	[KAMMAN-CAIR #P216A03]	2
	1	C2-3-41	WIRE	16 GA 316 STAINLESS WIRE	1 FOOT [KAMMAN-CAIR #P216A03]	2
	1	C2-3-42	LABEL	ALUMINUM		NIS
	1	C2-3-43	CAUTION SIGN	ALUMINUM		NIS
	1	C2-3-44	CLOCK SPRING COVER & BUSH	NYLON	[KAMMAN-CAIR #P2210A194]	2
	1	C2-3-45	SET SCREW	S.S.	10-32 X 1/4 [KAMMAN-CAIR #P433A330]	2
	1	C2-3-46	SCREW	STEEL	1/4-28 X 1-7/8	2
	1	C2-3-47	KEEPER SHAFT EQUIT	STEEL	1/4-28 X 1-29/32	2
	1	C2-3-48	WASHER	STEEL	3/8-24 X 1.703	2
	1	C2-3-49	WASHER	STEEL	#10	2
	1	C2-3-50	WASHER	STEEL	#10	2
	1	C2-3-51	KEEPER WASHIER, LOW PROFILE	STEEL	81/8	2
	1	C2-3-52	LOCK NUT	STEEL	1/4-28	2
	1	C2-3-53	KEEPER NUT	STEEL	1/4-32	2
	1	C2-3-54	SOLENOID COVER SCREW	STEEL	3/8-24	2
	1	C2-3-55	22-16 AWG KNEE CONNECTOR	S.S.	#10-32 X 7/8	2
	1	C2-3-56	HEAT SHRINK TUBE	RUBBER	[KAMMAN-CAIR #P216A03]	2



NOTE:
FOR REBUILD ONLY.
FOR CUSTOMER REBUILD ONLY.

DART
ASSEMBLY

C3 HOOK ASSY

DATE: 8/27/2015
DRAWN BY: C3
REV: 2

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1. BREAK ALL SHARP EDGES .015 X .45" SPEC
2. DIMENSIONAL LIMITS APPLY AFTER FINISHING

SCALE: 1:3 DATE: SHEET 1 OF 3

Inspection Sheet Complete RA759

Part Number	Original Batch / Serial # / Ctrl #	Original Revision #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Original Container #	New (Receiving) Serial #	New Job #	Work order instructions
C3	2428-03		1	☒ Yes	☐ Yes	☐ Yes	☒ Yes	CUSTOMER SUPPLIED		S205356	OH199340	Overhaul
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					

Customer QA Ref # 0

QC Approval: 0
Date: 0-Jan-00

Special Return/Rework Instructions:

RA759



Wendake Hélicoptère Inc.
1015 Avenue Max Gros Louis
Wendake (Québec) G0A 4V0
Tél.: 418-843-7272
Télec.: 418-843-1012
info@wendakehelicoptere.com
AMO: 26-10

Overhaul Order #150	
Date	Aug 1, 2019
Created By	Pierre-Luc Tremblay
Type	Overhaul
Currency	USD
Page 1 / 1	

Overhaul Order #150

To	Order from
DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY ONTARIO K6A 1K7 Canada Tel: 1-800-556-4166, Fax: 1-613-632-4443 Email: llamoureux@dartaero.com	WENDAKE HÉLIPTÈRE INC. 130 rue Tibo Ste-Catherine-J-Cartier, Quebec, Canada G3N 2Y7 Tel: 418-875-0101, Fax: 418-875-2999
Ship to	Bill to
WENDAKE HÉLIPTÈRE 130 rue Tibo Ste-Catherine-J-Cartier, QC G3N 2Y7 info@wendakehelicoptere.com Tel: 418-875-5111, Fax: 418-875-2999	WENDAKE HÉLIPTÈRE 130 rue Tibo Ste-Catherine-J-Cartier, QC G3N 2Y7 info@wendakehelicoptere.com Tel: 418-875-5111, Fax: 418-875-2999

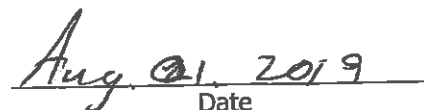
** Work to be accomplished at this time **

Please, perform Overhaul
Update all applicable AD's and SB.
A work report is required
Estimation is needed.

Parts description

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
C3	CARGO HOOK	2900	2428-03			C-GFHS	0.00
C:C	Defect	5 years O/H to be performed					


Signature


Date

Pre test

****MAKE SURE YOU ARE USING THE CORRECT TEST FORM FOR THE CORRECT SOLENOID!****

Old SOLENOID (H2817-024)

Work Order OH 199340

Customer RA759 / order 18544

Serial Number 2428-03

Date 2019-8-22

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/Fail
1	7,500	Static Hold	Hold for two Minutes and reduce load to zero	N/A	<i>Pass</i>
10	1,500	Electircal, 25 volts	No "hang ups" permitted	N/A	<i>Pass</i>
2	3,000	Electircal, 22 volts	Current shall not exceed 4.5A	A	<i>Fail</i>
2	2,500	Electircal, 22 volts	Current shall not exceed 4.5A	A	
2	2,000	Electircal, 22 volts	Current shall not exceed 4.5A	A	
2	1,500	Electircal, 22 volts	Current shall not exceed 4.5A	A	
2	500	Electircal, 22 volts	Current shall not exceed 4.5A	A	
1	3,000	Electircal, 20 volts	Current shall not exceed 4.1A	A	
1	3,000	Electircal, 28 volts	Current shall not exceed 5.7A	A	
1	3,000	Manual		N/A	
1	3,000	Impact Test	Impact shackle 10 times, shall not release	N/A	
1	N/A	Solenoid Ohms	Shall not exceed 4.9-5.6 Ohms	Ohm	
1	N/A	Electircal Continuity	Across both wires	N/A	

Test Conducted By: Michel Lalonde

Technician

Signature: _____

QC 5 Small FAB / QA

Submit



Overhaul Incoming Inspection
C3 Cargo Hook

Customer OH199340 / RA759

Date 2019/09/04

ORDER Number 18544

Serial Number 2428-03

RA759- Job OH199340

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) X	C3-8-2	SELEPOID	S210004	☒
(1) X	C3-12-5	LOCK ROLLER PIN	S188182	☒
(2) X	C3-3-4	LINK PIN	N	☒
(1) X	C2-5-1	ACTUATOR STOP	S216722	☒
(2) X	C2-11-2	LOCATING PIN	S061528	☒
(2) X	ANG-17A	BOLT	S104372	☒
(2) X	MS21044N6	NUT	S181732	☒
(4) X	NAS1149F0663P	WASHER	S106716	☒
				☐

Approved

9-4-2019

Inspected By ALAIN PATRY



Overhaul Incoming Inspection

C3 Cargo Hook

Customer

OH 199340 / RA 759

Date

2019/09/04

ORDER Number

18544

Serial Number

2428-03

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) X	C3-8-2	SELEPOID	☐
(1) X	C3-12-5	LOCK ROLLER PIN	☐
(2) X	C3-3-4	LINK PIN	☐
(1) X	C2-5-1	ACTUATOR STOP	☐
(2) X	C2-11-2	LOCATING PIN	☐
(1) X	C3-9-2	clock spring = 5089524	☐
(2) X	AN6-17A	BOLT	☐
(2) X	MS21044N6	NUT	☐
(4) X	NAS1149F0663P	WASHER	☐
			☐

Inspected By

ALAIN PATRY



Overhaul Incoming Inspection

C3 Cargo Hook

Customer

OH 199340 / RA 759

Date

2019/09/04

ORDER Number

18544

Serial Number

2428-03

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) X C3-8-2 SELENOID☐(1) X C3-12-5 LOCK ROLLER PIN☐(2) X C3-3-4 LINK PIN☐(1) X C2-5-1 ACTUATOR STOP☐(2) X C2-11-2 LOCATING PIN☐(2) X ANG-17A BOLT☐(2) X MS21044N6 NUT☐(4) X NAS1149F0663P WASHER☐☐☐

Inspected By

ALAIN PATRY

Work Order OH199340Customer RA759/ORDER 18544Serial Number 2428-03Date 2019/09/03**MAGNAFLUX**

Part Number	Description	Quantity	
C3-4-4A	Load Beam	1	
<u>C2-3-11</u>	Actuator Shaft	1	
C3-3-7	Link	1	
C3-3-4	Link Pins	0	
<u>C2-3-6</u>	Latch	1	
<u>C2-3-3</u>	Latch Roller	1	
<u>C2-3-2</u>	Latch Roller Pin	0	
<u>C2-3-10</u>	Latch Shaft	1	
C3-12-3	Lock	1	
C3-12-2	Lock Shaft	1	
C3-12-4	Lock Roller	1	
C3-12-5	Lock Roller Pin	1	
<u>C3-13-4</u>	<u>KEEPER</u>	1	

ZYGLO**TOTAL : 11**

Part Number	Description	Quantity	Pass/Fail
C3-2-1	Side Plate	1	
C3-11-1	Side Plate Solenoid	1	

TOTAL : 2

Test Conducted By:

Signature: *Sylvia Sanchez*ALAIN PATRY

Jennifer Renwick

From: Lacey Cantin
Sent: Wednesday, September 04, 2019 2:20 PM
To: Jennifer Renwick; Chantal Chartrand
Cc: Jason Leroux; Linda Lacelle
Subject: RE: C3 Hook Overhaul "AOG"

Approved!

Chantal, can you please change the total cost on order 18544 to be \$1,659.00 USD, and add in notes that these are the parts replaced:

C3-8-2 - \$355.00
C3-12-5 - \$50.00
C3-3-4 - \$68.00
C2-5-1 - \$5.00
C2-11-2 - \$10.00
AN6-17A - \$10.00
MS21044N6 - \$12.00
NAS1149F0663P - \$24.00

Thanks ☺

Lacey

From: Jennifer Renwick
Sent: September 4, 2019 11:31 AM
To: Lacey Cantin <lcantin@dartaero.com>
Cc: Jason Leroux <jleroux@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Subject: RE: C3 Hook Overhaul "AOG"

Hi Lacey,

Please see attached inspection sheet for the extra parts needed.

RA759
Order 18544
Job OH199340

Thank you,
Jen

From: Jennifer Renwick
Sent: Tuesday, August 20, 2019 11:53 AM
To: Lacey Cantin <lcantin@dartaero.com>
Cc: Jason Leroux <jleroux@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Subject: RE: C3 Hook Overhaul "AOG"

From: Jennifer Renwick <jrenwick@dartaero.com>

Subject: RE: C3 Hook Overhaul "AOG"

Hi All,

Spoke to Pierre-Luc and he will be taking the C3 loaner. As per Richard, we will be charging him 1% of the value of the C3 hook per business day that this is in his possession. I have quoted him accordingly for this, and this will help him get out of a tough spot.

Jen, can you kindly issue me an RMA for the C3 hook he's sending back for overhaul? I will be entering the loaner hook into PLEX shortly, he is sending me a PO momentarily. Is there anything that I should note or a specific sku I should use for this order so as not to confuse anyone and start the manufacturing process on a new C3 hook?

Let me know, and thanks everyone for all your help!!

Lacey

From: Marc Bellavance

Sent: August 1, 2019 1:41 PM

To: Lacey Cantin <lcantin@dartaero.com>

Cc: Jennifer Renwick <jrenwick@dartaero.com>

Subject: C3 Hook Overhaul "AOG"

Importance: High

Hi Lacey,

Been trying to contact you via Teams to further discuss this issue overhaul with Wendake Helicopters Inc.

Pierre-Luc Tremblay is the contact: 418-843-7272. Pierre-Luc is to try to contact you as well.

They have a C3 Hook requiring overhaul ASAP. They need early next week. We can't overhaul a hook this fast. Jen see that we have one we could provide as a loaner and I'm told that you have all the details on a Sales point o view. They also want to know if the cage needs to be overhauled at the same time. I don't believe that there is requirement but I'm new to supporting hooks so I'm not 100% sure about this...

Please contact Pierre-Luc ASAP and keep Jen and I in the loop.

Thanks,

Marc Bellavance

Mechanical Designer / Technical Support

DART AEROSPACE

T 1 613 632 5200 > 243

M 1 613 676 0992 > Customer Support

M 1 613 677 4570 > Direct

F 1 613 632 9311

S marcbellavance

www.dartaerospace.com



Note Customer Support has a new email address: support@dartaero.com. Please use this address for all future support inquiries. The following addresses have been retired : support.ON@dartaero.com, support.CA@dartaero.com, support.OR@dartaero.com.



Overhaul Incoming Inspection

C3 Cargo Hook

Customer

OH 199340 / RA 759

Date

2019/09/04

ORDER Number

18544

Serial Number

2428-03

RA759- Job OH 199340

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) X C3-8-2 SELEPOID



(1) X C3-12-5 LOCK ROLLER PIN



(2) X C3-3-4 LINK PIN



(1) X C2-5-1 ACTUATOR STOP



(2) X C2-11-2 LOCATING PIN



(2) X ANG-17A BOLT



(2) X MS21044N6 NUT



(4) X NAS1149F0663P WASHER



Inspected By

ALAIN PATRY

Approved
9-4-2019

Work Order OH199340Customer RA759/ORDER 18544Serial Number 2428-03Date 2019/09/03**MAGNAFLUX**

Part Number	Description	Quantity	
C3-4-4A	Load Beam	1	
<u>C2-3-11</u>	Actuator Shaft	1	
C3-3-7	Link	1	
C3-3-4	Link Pins	0	
<u>C2-3-6</u>	Latch	1	
<u>C2-3-3</u>	Latch Roller	1	
<u>C2-3-2</u>	Latch Roller Pin	0	
<u>C2-3-10</u>	Latch Shaft	1	
C3-12-3	Lock	1	
C3-12-2	Lock Shaft	1	
C3-12-4	Lock Roller	1	
C3-12-5	Lock Roller Pin	1	
<u>C3-13-4</u>	<u>KEEPER</u>	1	

ZYGLOTOTAL : 11

Part Number	Description	Quantity	Pass/Fail
C3-2-1	Side Plate	1	
C3-11-1	Side Plate Solenoid	1	

TOTAL : 2

Test Conducted By:

Signature: _____

ALAN PATRY



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044484



Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

Attention: Jenne, Heather

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044484

PO Date: 9/12/19

Due Date: 9/17/19

**Purchase Order
Revision:**

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	OH199340	C3-OH	C-Series Remote Hook 3,000 lbs Lift Capacity LIQUID PENETRANT INSPECTION AS PER QSI 038	Firmed - XI		9/17/19	1 pcs	0 pcs	1 pcs	\$178.00/pcs	\$178.00
2	OH199890	SWA15A-2-OH	Electric Swivel 15,000 lb Safe Work Load (6,818 kg) LIQUID PENETRANT INSPECTION AS PER QSI 038	Firmed - XI		9/17/19	1 pcs	0 pcs	1 pcs	\$178.00/pcs	\$178.00
Grand Total:											\$356.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 9/13/19 11:17 AM Dart.Guerin.Kimberley

**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 365

WO #: MWO41731	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: POHB044484
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON:

1 C-SERIES REMOTE HOOK (13 PCS) , P/N# C3-OH , J/S# OH199340

1 ELECTRIC SWIVEL (6 PCS) P/N# SWA 15A-2-OH , J/S# OH199890

Action Taken:						Date:	Initial/Stamp:
LPI & MPI C/O IAW ASTM E-1417 AND ASTM E-1444M-16						SEP 13 2019	313 DOT-APP 310 53-89 120 DAS 81 9-89
NO CRACK FOUND							
PEN , ZL-37 MPO#: 23206 CLEANER SKC-S MPO15030, EMU.(ZR-10B, MPO23451), DEV. MPO15030, UV LIGHT M-20142							
MAGBENCH S/N 208123 CAL DUE: 25-SEP-2019 POWDER 14A BATCH# MPO13600 CARRIER II BATCH# MPO22794 BLACK LIGHT-M20186							
RECEIVED SEP 16 2019 DART AEROSPACE LTD.							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp DOT-APP 310 53-89	Date: SEP 13 2019
Name: RICARDO VARGAS		

DART

DATE: 2019/09/23

NICKEL PLATING

MODEL: C3

S/N : 2428-03

JOB : OH199340

ORDER : 18544

P/N	DESCRIPTION	QUANTITY
C3-4-4A	LOAD BEAM ASSY	1
C3-13-4	KEEPER	1
C3-12-3	LOCK	1
C3-12-4	LOCK ROLLER	1
C2-3-3	LATCH ROLLER	1
A. PATRY	TOTAL	5 Pcs



DATE: 2019/09/25

NICKEL PLATING

MODEL: C3

S/N : 2428-03

JOB : 0H199340

ORDER : 18544

P/N	DESCRIPTION	QUANTITY
C3-4-4A	LOAD BEAM ASSY	1 ✓
C3-13-4	KEEPER	1 ✓
C3-12-3	LOCK	1 ✓
C3-12-4	LOCK ROLLER	1 ✓
C2-3-3	LATCH ROLLER <u>Scrap</u>	1
A. PATRY	TOTAL	5 Pcs



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB044581



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044581

PO Date: 9/24/19

Due Date: 10/2/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-10-02

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	OH199340	C3-OH	C-Series Remote Hook 3,000 lbs Lift Capacity -Issue P/O; -All noncertified parts specifying a finish of Nickel Plating per QQ-N-290, or parts with drawings that are missing a specification Can be Nickel Plated per ASTM B733 Type 4/5, SC0-SC4 or MIL-C-26074 Class 1/2 -Material type; 4140 -Heat treat must be carried out to specified hardness if noted on the drawing. -Plating thickness must be carried out as specified on the drawing. -Certificate of Conformity is required	Firmed		10/2/19	1 pcs	0 pcs	1 pcs	\$330.00/pcs	\$330.00

Line Item Note: 1 kit = 5 pcs

Grand Total: \$330.00

OCT 04 2019



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044581



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/2/19 8:53 AM Dart.Guerin.Kimberley

**Certificat de Conformité / Certificate of Compliance**
(022718-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
Tel: 514-335-3666 Fax: 514-335-3868
www.groupealtech.com

Bon de Livraison / Packing Slip**022718-1**

Livré à / Ship to

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA

Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON, K6A1K7
CANADA
BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
30-Sep-2019		Jigar Patel			POHB044581			
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C3-OH Rev.	C3-OH 01 - E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290, CAN BE NICKEL PLATED AS PER ASTM B733 TYPE 4/5, SC4-SC4 OR MIL-C-26074 CLASS 1/2 MATERIAL TYPE: 4140 BAKE AFTER 1 KIT = 5 PCS	E-NICKEL STEEL LOT	1	1	0	0	0
2	BAKE Rev.	BAKE 01 - BAKING, HYDROGEN EMBRITTLEMENT RELIEF	BAKE MIN-CHG	1	1	0	0	0

OCT 04 2019

RECEIVED
OCT 04 2019
DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

Épaisseur réelle
Actual ThicknessInspecteur Qualité
Quality InspectorRéçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
Our financial and legal responsibility will not be higher than the amount of invoice.

****MAKE SURE YOU ARE USING THE CORRECT TEST FORM FOR THE CORRECT SOLENOID!****

NEW SOLENOID (152951-001)

Work Order OH199340

Customer RA 759 / Order 18544

Serial Number 2428-03

Date 2019-10-28

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/Fail
1	7,500	Static Hold	Hold for two minutes and reduce load to zero	N/A	<u>Pass</u>
10	1,500	Electircal, 25 volts	No "hang ups" permitted	N/A	<u>Pass</u>
2	3,000	Electircal, 22 volts	Current shall not exceed 12.8 A	<u>9.1</u> A	<u>Pass</u>
2	2,500	Electircal, 22 volts	Current shall not exceed 12.8 A	<u>9.0</u> A	<u>Pass</u>
2	2,000	Electircal, 22 volts	Current shall not exceed 12.8 A	<u>8.9</u> A	<u>Pass</u>
2	1,500	Electircal, 22 volts	Current shall not exceed 12.8 A	<u>8.9</u> A	<u>Pass</u>
2	500	Electircal, 22 volts	Current shall not exceed 12.8 A	<u>8.8</u> A	<u>Pass</u>
1	3,000	Electircal, 20 volts	Current shall not exceed 11.6 A	<u>8.1</u> A	<u>Pass</u>
1	3,000	Electircal, 28 volts	Current shall not exceed 16.2 A	<u>11.5</u> A	<u>Pass</u>
1	3,000	Manual		N/A	<u>Pass</u>
1	3,000	Impact Test	Impact shackle 10x , shall not release	N/A	<u>Pass</u>
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ω	<u>1.9</u> Ω	<u>Pass</u>
1	N/A	Electircal Continuity	Across both wires	N/A	<u>Pass</u>

Test Conducted By:

Michel Lalonde

Technician

Submit

Signature:

Sylvie Poirier
QC 5 Small FAB / QA